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| APPLICATION NO.                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/662,020                           | 09/11/2003  | Gregory Shirin       | 15437-0578          | 8580             |
| 29989                                | 7590        | 02/02/2004           | EXAMINER            |                  |
| HICKMAN PALERMO TRUONG & BECKER, LLP |             |                      | HUANG, EVELYN MEI   |                  |
| 1600 WILLOW STREET                   |             |                      | ART UNIT            |                  |
| SAN JOSE, CA 95125                   |             |                      | PAPER NUMBER        |                  |

1625

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/662,020

Applicant(s)

SHIRIN ET AL.

Examiner

Evelyn Huang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-8 are pending.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossey (4794185, cited by applicant) in view of Sohda (5932592).

Rossey discloses the instant compound of formula I and the process of making thereof by reacting the hydroxy compound of formula IV (corresponding to the instant formula III) with a halogenating agent, such as thionyl chloride, in an organic solvent, such as a chlorinated solvent to form an intermediate leading to compound of formula I (column 1, lines 54-66; column 7, Reaction Scheme).

The instant process employ phosphorus tribromide instead of Rossey's thionyl chloride as the halogenating agent to form the corresponding intermediate leading to the formation of the compound of formula I.

Phosphorus tribromide and thionyl chloride are well known in the art to be preferred halogenating agents for hydroxy, as specifically described by Sohda (column 16, lines 50-57).

At the time of the invention, the skilled artisan is deemed to be aware of all the alternative reactants for the reaction of interest and would be motivated to replace the thionyl chloride of Rossey with the alternative phosphorus tribromide as the halogenating agent as suggested by Sohda to arrive at the instant process with the reasonable expectation of having an additional process effective for the synthesis of the compound of formula I.

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4. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rossey (4794185, cited by applicant) in view of George (4808594) and/or Whitfield (GB 793807, cited by applicant) and/or Perez (J. Org. Chem. 1988, 53: 408-413)

Rossey discloses the instant compound of formula III and the process of making thereof. Rossey's process involves the reaction of the imidazopyridine of formula (II) with an acetamide compound of formula (III) (column 1, lines 54-64; column 7, Reaction Scheme).

The instant process uses a dialkylglyoxylamide (II) instead of Rossey's acetamide of formula (III) to react with the same imidazopyridine starting compound.

The reaction of dialkylglyoxylamide with a imidazopyridine compound for the introduction of the hydroxyacetamide chain onto the imidazopyridine has been described by George (column 2, lines 9-11; columns 6-7, Scheme 1 and Scheme 2; column 3, Example 3). The production of such glyoxyamide has been described by Whitfield (page 2, (III)) and by Perez (page 408, compound 3b).

At the time of the invention, the skilled artisan is deemed to be aware of all the alternative reactants for the reaction of interest and would be motivated to replace the acetamide of Rossey with the alternative glyoxylamide suggested by George, Whitfield and/or Perez to arrive at the instant process with the reasonable expectation of having an additional process effective for the synthesis of the compound of formula III.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 is an independent claim, but the structure of formula III is not described therein. It is recommended that the structure of formula III be included in the claim for clarification purposes.

***Conclusion***

6. No claims are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Evelyn Huang

Primary Examiner

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11/16/04  
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